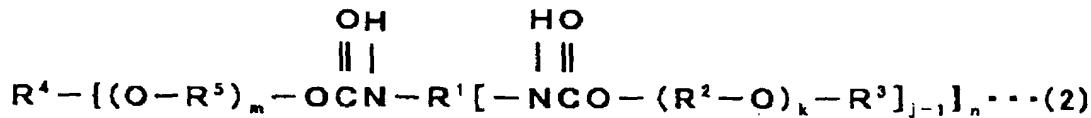
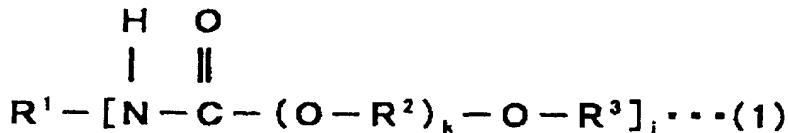


## CLAIMS

1 A water-borne coating composition comprising  
 an emulsion resin obtained by emulsion polymerization of  
 5 an  $\alpha,\beta$ -ethylenically unsaturated monomer mixture comprising  
 not less than 65% by weight of a (meth)acrylate ester whose  
 ester-forming moiety contains 1 or 2 carbon atoms and having  
 an acid value of 3 to 50 and  
 a urethane compound represented by the general formula  
 10 (1) or (2):



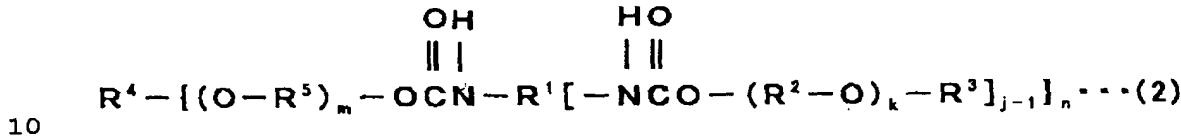
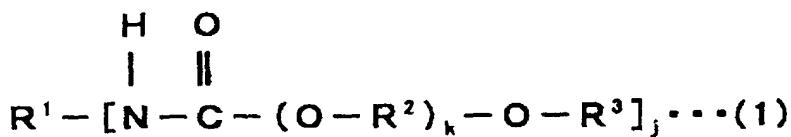
15 in formulas,  $\text{R}^1$ ,  $\text{R}^2$ ,  $\text{R}^3$ ,  $\text{R}^4$  and  $\text{R}^5$  may be the same or different  
 and each represents a hydrocarbon group,  $\text{R}^1$  represents a  
 hydrocarbon group which may optionally have a urethane bond,  
 $\text{R}^3$  represents a branched or secondary hydrocarbon group,  $n$  is  
 20 a number not less than 2,  $j$  is a number not less than 1 in the  
 general formula (1) or a number not less than 2 in the general  
 formula (2) and  $k$  and  $m$  each is a number within the range of  
 1 to 500,

wherein the content of said urethane compound is 0.01 to  
 25 20% by weight on the solid basis relative to the resin solid  
 in the coating composition.

2. A water-borne coating composition comprising  
 a water-borne resin resulting from dissolving or

dispersing a resin having an acid value of 10 to 100, a hydroxyl value of 30 to 200 and a weight average molecular weight of 4,000 to 2,000,000 in an aqueous medium by means of a neutralizing base and

5        a urethane compound represented by the general formula (1) or (2):



in formulas,  $\text{R}^1$ ,  $\text{R}^2$ ,  $\text{R}^3$ ,  $\text{R}^4$  and  $\text{R}^5$  may be the same or different and each represents a hydrocarbon group,  $\text{R}^1$  represents a hydrocarbon group which may optionally have a urethane bond, 15  $\text{R}^3$  represents a branched or secondary hydrocarbon group,  $n$  is a number not less than 2,  $j$  is a number not less than 1 in the general formula (1) or a number not less than 2 in the general formula (2) and  $k$  and  $m$  each is a number within the range of 1 to 500,

20        wherein the content of said urethane compound is 0.01 to 20% by weight on the solid basis relative to the resin solid in the coating composition.

25        3. The water-borne coating composition according to  
 Claim 1 or 2,  
 wherein, in the general formula (1) or (2),  $\text{R}^2$  and  $\text{R}^5$  may be the same or different and each is an alkylene group containing 2 to 4 carbon atoms or a phenylethylene group.

*Feb 21*

4. The water-borne coating composition according to any of Claims 1 to 3,

wherein, in said general formula (1) or (2), R<sup>3</sup> is a branched or secondary alkyl group containing 8 to 36 carbon atoms.

5. The water-borne coating composition according to any of Claims 1 to 4,

which comprises a color component.

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6. The water-borne coating composition according to any of Claims 1 to 5,

which comprises a polyether polyol having not less than 0.02, on average, of a primary hydroxyl group per molecule, a number average molecular weight of 300 to 3,000 and a water tolerance value of not less than 2.0.

7. The water-borne coating composition according to Claim 6,

20

wherein said polyether polyol has at least one primary hydroxyl group per molecule and a hydroxyl value of 30 to 700.

8. The water-borne coating composition according to Claim 6 or 7,

25 wherein said polyether polyol has at least 3 hydroxyl groups per molecule.

9. The water-borne coating composition according to any of Claims 1 to 8,

30

which comprises a polyester resin and/or an alkyd resin.

10. A method of forming a multilayer coating film comprising: applying a water-borne base coating to an article to be coated and then applying a clear coating thereonto, followed by curing by heating,

35

wherein said water-borne base coating is the water-borne coating composition according to any of Claims 5 to 9.

11. The method of forming a multilayer coating film  
5 according to Claim 10,

wherein said color component is a color pigment and/or a luster color pigment.

12. The method of forming a multilayer coating film  
10 according to Claim 10 or 11,

wherein said water-borne base coating has an application viscosity at 25°C of 500 to 5000 mPa · s as determined on a single cylindrical rotational viscometer at 6 rpm.

15 13. A multilayer coating film obtainable by the method according to any of Claims 9 to 12.

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